Notice No. JCH:11122103.bah

Public Notice Beginning Date: March 18, 2015

Public Notice Ending Date: April 17, 2015

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET

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Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger: City of Granite City 2000 Edison Avenue Granite City, Illinois 62040 Name and Address of Facility: City of Granite City WWTP River Edge Business Campus 8th & D Street Granite City, Illinois (Madison County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Jeff Hutton at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic and industrial wastewater for the City of Granite City, Metro East Sanitary District, portions of Madison County and the Village of Glen Carbon.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, Chain of Rocks Canal is 538 cfs.

The design average flow (DAF) for the facility is 23 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 34.54 MGD. Treatment consists of screening, equalization, primary settling, activated sludge, and chlorine disinfection. Sludge is thickened, dewatered on a belt press and land filled.

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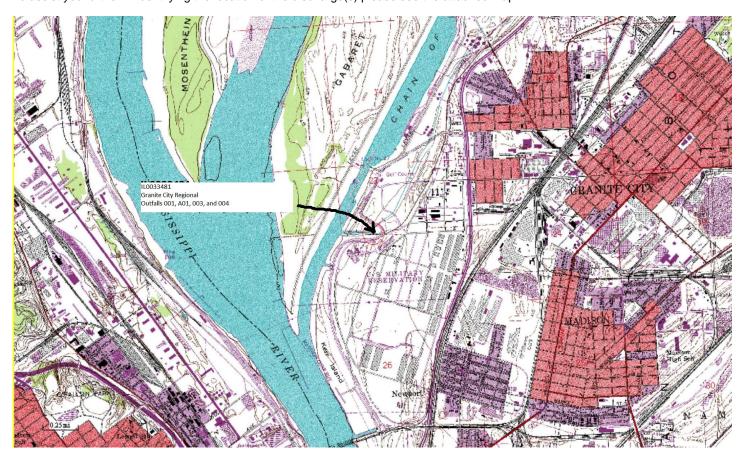
This treatment works has an approved pretreatment program. There are 10 noncategorical SIUs and 10 CIUs.

This Reissued Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits.

Application is made for the existing discharge(s) which are located in Madison County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Discharge <u>Number</u>	Receiving Stream	<u>Latitude</u>	<u>Longitude</u>	Stream Classification	Integrity <u>Rating</u>
001	Chain of Rocks Canal	38° 41′ 47" North	90° 10′ 49″ West	General Use	Not Listed
A01	Chain of Rocks Canal	38° 41′ 47" North	90° 10′ 49″ West	General Use	Not Listed
003	Chain of Rocks Canal	38° 41′ 47" North	90° 10′ 49″ West	General Use	Not Listed
004	Chain of Rocks Canal	38° 41′ 47" North	90° 10′ 49″ West	General Use	Not Listed

To assist you further in identifying the location of the discharge(s) please see the attached map.



The stream segment(s), J0, receiving the discharge from outfall(s) 001, A01, 003, and 004 are on the 2012 303(d) list of impaired waters..

The following parameters have been identified as the pollutants causing impairment:

Potential Causes	<u>Uses Impaired</u>
Polychlorinated biphenyls	Fish consumption
Manganese	Public and food processing water supply

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The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 23 MGD (design maximum flow (DMF) of 34.54 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LC	DAD LIMITS lbs/d DAF (DMF)*	lay	C	CONCENTRAT LIMITS mg/l	-	
<u>Parameter</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly Average	Weekly <u>Average</u>	Daily <u>Maximum</u>	<u>Regulation</u>
CBOD <sub>5</sub>	3836 (5755)	7673 (11509)		20	40		35 IAC 304.120 40 CFR 133.102
Suspended Solids	4796 (7193)	8632 (12948)		25	45		35 IAC 304.120 40 CFR 133.102
рН	Shall be in the	range of 6 to 9 S	Standard Units				35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)					35 IAC 304.121	
Total Chlorine Residual						0.75	35 IAC 302.208
Phosphorous (as P)	Monitor Only						35 IAC 309.146
Total Nitrogen	Monitor Only						35 IAC 309.146
Ammonia Nitrogen: March.			1611 (2417)			8.4	35 IAC 355 and 35 IAC 302
April-May/Sept-Oct	1515 (2273)		1611 (2417)	7.9		8.4	
June-August	1515 (2273)		1937 (2906)	7.9		10.1	
NovFeb.			1937 (2906)			10.1	

<sup>\*</sup>Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

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This Permit contains an approval to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): A01 Treated Combined Sewage Outfall (Flows over 34.5 MGD)

	CONCENTRATION LIMITS (mg/L)	,
<u>Parameter</u>	Monthly Average	<u>Regulation</u>
BOD <sub>5</sub>		35 IAC 309.146
Suspended Solids		35 IAC 309.146
Ammonia Nitrogen (as N)		35 IAC 309.146
Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 mL	35 IAC 304.121
рН	Shall be in the range of 6 to 9 Standard Units	35 IAC 304.125
Chlorine Residual	0.75	35 IAC 302.208

This draft Permit also contains the following requirements as special conditions:

- 1. Reopening of this Permit to include different final effluent limitations.
- Operation of the facility by or under the supervision of a certified operator.
- 3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
- 4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
- 5. Prohibition against causing or contributing to violations of water quality standards.
- 6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
- 7. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.
- 8. Effluent sampling point location.
- 9. Controlling the sources of infiltration and inflow into the sewer system.
- 10. Seasonal fecal coliform limits.
- 11. The Permittee implements and administers an industrial pretreatment program pursuant to 40 CFR §403.
- 12. Burden reduction.
- Submission of annual fiscal data.
- 14. A requirement for biomonitoring of the effluent.
- 15. An approval of combined sewers and treatment plant discharges.
- 16. Submission of semi-annual reports indicating the quantities of sludge generated and disposed.
- 17. Development and implementation of a CMOM Plan
- 18. Allowance to perform a delineation study for a mixing zone and zone of initial dilution (ZID).
- 19. Prepare a phosphorus removal feasibility study.
- 20. Development of a phosphorus discharge optimization plan.

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: Issue Date: Effective Date:

Name and Address of Permittee:

City of Granite City
2000 Edison Avenue

Granite City, Illinois 62040

Street
Granite City, Illinois
(Madison County)

Receiving Waters: Chain of Rocks Canal

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above named Permittee is hereby authorized to discharge at the above location to the above named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

SAK:JCH:11122103.bah

# Effluent Limitations, Monitoring, and Reporting

### **FINAL**

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 23 MGD (design maximum flow (DMF) of 34.54 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day <u>DAF (DMF)*</u>		CONCENTRATION <u>LIMITS mg/L</u>					
<u>Parameter</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	<u>Daily</u> <u>Maximum</u>	Sample <u>Frequency</u>	Sample <u>Type</u>
Flow (MGD)							Continuous	
CBOD <sub>5</sub> **	3836 (5755)	7673 (11509)		20	40		2 Days/Week	Composite
Suspended Solids	4796 (7193)	8632 (12948)		25	45		2 Days/Week	Composite
pH	Shall be in the	range of 6 to 9 S	tandard Units				2 Days/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						2 Days/Week	Grab
Chlorine Residual***	0.75						2 Days/Week	Grab
Total Phosphorous (as P)	Monitor Only						1 Day/Month	Composite
Total Nitrogen	Monitor Only						1 Day/Month	Composite
Ammonia Nitrogen As (N):								
March			1611 (2417)			8.4	2 Days/Week	Composite
AprilMay/SeptOct.	1515 (2273) 1937 (2906) 7.9				8.4	2 Days/Week	Composite	
June-August	1515 (2273) 1937 (2906) 7.9					10.1	2 Days/Week	Composite
NovFeb.			691(1037)			10.1	2 Days/Week	Composite

<sup>\*</sup>Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum. Fecal Coliform shall be reported on the DMR as a daily maximum value. pH shall be reported on the DMR as minimum and maximum value. Chlorine Residual shall be reported on DMR as daily maximum value.

<sup>\*\*</sup>Carbonaceous BOD<sub>5</sub> (CBOD<sub>5</sub>) testing shall be in accordance with 40 CFR 136.

<sup>\*\*\*</sup>See Special Condition 10.

# Effluent, Limitations, Monitoring, and Reporting

Discharge Number(s) and Name(s): A01 Treated Combined Sewage Outfall (Flows over 34.5 MGD)

These flow facilities shall not be utilized until the main treatment facility is receiving its design maximum flow (DMF)\* (flow in excess of 23958 gpm).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	CONCENTRATION LIMITS (mg/L)		
<u>Parameter</u>	Monthly Average	Sample Frequency	Sample Type
Total Flow (MG)		Daily When Discharging	Continuous
BOD₅		Daily When Discharging	Grab
Suspended Solids		Daily When Discharging	Grab
Ammonia Nitrogen (as N)			
Fecal Coliform	Daily Maximum Shall not Exceed 400 per 100 mL	Daily When Discharging	Grab
рН	Shall be in the range of 6 to 9 Standard Units	Daily When Discharging	Grab
Chlorine Residual	0.75	Daily When Discharging	Grab

<sup>\*</sup>An explanation shall be provided in the comment section of the DMR should these facilities be used when the main treatment facility is not receiving Design Maximum Flow (DMF). The explanation shall identify the reasons the main facility is at a diminished treatment capacity. Additionally, the Permittee shall comply with the provisions of Special Condition 7.

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

BOD<sub>5</sub> and Suspended Solids shall be reported on the DMR as a monthly average concentration.

Fecal Coliform shall be reported on the DMR as daily maximum.

pH shall be reported on the DMR as a minimum and a maximum.

Chlorine Residual shall be reported on the DMR as monthly average.

# Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD <sub>5</sub>	2 Days/Week	Composite
Suspended Solids	2 Days/Week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

 $\mathsf{BOD}_5$  and Suspended Solids shall be reported on the DMR as a monthly average concentration.

<u>SPECIAL CONDITION 1</u>. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

<u>SPECIAL CONDITION 3</u>. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

<u>SPECIAL CONDITION 4</u>. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

<u>SPECIAL CONDITION 5</u>. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION</u> 6: The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attention: Compliance Assurance Section, Mail Code # 19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated hererin by reference.

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements shall be taken:

- A. For Discharge Number 001 During dry weather flows (no excess flow discharge), samples shall be taken at a point representative of the flows but prior to entry into the receiving stream. During periods of excess flow discharge, CBOD<sub>5</sub>, Suspended Solids, and Ammonia Nitrogen, if Ammonia Nitrogen monitoring and sampling is required on the Effluent Limitations, Monitoring, and Reporting Page of this Permit, shall be monitored at a point representative of the discharge but prior to admixture with the excess flow. If Fecal Coliform limits are different for Discharge Numbers 001 and A01, sampling shall occur at a point representative of the discharge and prior to admixture, if hardware allows. Other parameters may be sampled after admixture but prior to entry into the receiving stream.
- B. For Discharge Number A01 Samples for all parameters shall be taken at a point representative of the discharge but prior to entry into the receiving stream. If Fecal Coliform limits are different for Discharge Numbers 001 and A01, sampling shall occur at a point representative of the discharge and prior to admixture, if hardware allows. The sampling point for other parameters may be at a point after admixture with the dry weather flows.

<u>SPECIAL CONDITION 9</u>. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

<u>SPECIAL CONDITION 10</u>. Fecal Coliform limits for Discharge Number 001 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

### SPECIAL CONDITION 11.

- A. Publicly Owned Treatment Works (POTW) Pretreatment Program General Provisions
- 1. The Permittee shall implement and enforce its approved Pretreatment Program which was approved on June 25, 1985 and all approved subsequent modifications thereto. The Permittee shall maintain legal authority adequate to fully implement the Pretreatment Program in compliance with Federal (40 CFR 403), State, and local laws and regulations. All definitions in this section unless specifically otherwise defined in this section, are those definitions listed in 40 CFR 403.3. USEPA Region 5 is the Approval Authority for the administration of pretreatment programs in Illinois. The Permittee shall:
  - a. Develop and implement procedures to ensure compliance with the requirments of a pretreatment program as specified in 40 CFR 403.8 (f) (2).
  - b. Carry out independent inspection and monitoring procedures at least once per year, which will determine whether each significant industrial user (SIU) is in compliance with applicable pretreatment standards;
  - c. Evaluate whether each SIU needs a slug control plan or other action to control slug discharges. If needed, the SIU slug control plan shall include the items specified in 40 CFR 403.8(f)(2)(vi). For Industrial Users (IUs) identified as significant prior to November 14, 2005, this evaluation must have been conducted at least once by October 14, 2006; additional SIUs must be evaluated within 1 year of being designated an SIU;
  - d. Update its inventory of Industrial Users (IUs) at least annually and as needed to ensure that all SIUs are properly identified, characterized, and categorized;
  - e. Receive and review self monitoring and other IU reports to determine compliance with all pretreatment standards and requirements, and obtain appropriate remedies for noncompliance by any IU with any pretreatment standard and/or requirement;
  - f. Investigate instances of noncompliance, collect and analyze samples, and compile other information with sufficient care as to produce evidence admissible in enforcement proceedings, including judicial action;
  - g. Require development, as necessary, of compliance schedules by each industrial user to meet applicable pretreatment standards; and,
  - h. Maintain an adequate revenue structure and staffing levels for continued operation of the Pretreatment Program.
- 2. The Permittee shall issue/reissue permits or equivalent control mechanisms to all SIUs prior to expiration of existing permits or prior to commencement of discharge in the case of new discharges. The permits at a minimum shall include the elements listed in 40 CFR § 403.8(f)(1)(iii).
- 3. The Permittee shall develop, maintain, and enforce, as necessary, local limits to implement the general and specific prohibitions in 40 CFR § 403.5 which prohibit the introduction of any pollutant(s) which cause pass through or interference and the introduction of specific pollutants to the waste treatment system from <u>any</u> source of nondomestic discharge.
- 4. In addition to the general limitations expressed in Paragraph 3 above, applicable pretreatment standards must be met by <u>all industrial users</u> of the POTW. These limitations include specific standards for certain industrial categories as determined by Section 307(b) and (c) of the Clean Water Act, State limits, or local limits, whichever are more stringent.
- 5. The USEPA and IEPA individually retain the right to take legal action against any industrial user and/or the POTW for those cases where an industrial user has failed to meet an applicable pretreatment standard by the deadline date regardless of whether or not such failure has resulted in a permit violation.
- 6. The Permittee shall establish agreements with all contributing jurisdictions, as necessary, to enable it to fulfill its requirements with respect to all IUs discharging to its system.
- 7. Unless already completed, the Permittee shall within one (1) year of the effective date of this Permit submit to USEPA and IEPA a proposal to modify and update its approved Pretreatment Program to incorporate Federal revisions to the general pretreatment regulations. The proposal shall include all changes to the approved program and the sewer use ordinance which are necessary to incorporate the revisions of the Pretreatment Streamlining Rule (which became effective on November 14, 2005), which are considered required changes, as described in the Pretreatment Streamlining Rule Fact Sheet 2.0: Required changes, available at: <a href="http://cfpub.epa.gov/npdes/whatsnew.cfm?program\_id=3">http://cfpub.epa.gov/npdes/whatsnew.cfm?program\_id=3</a>. This includes any necessary revisions to the Permittee's

### Enforcement Response Plan (ERP).

- 8. Within 1 year from the effective date of this permit, the Permittee shall conduct a technical re-evaluation of its local limitations consistent with U.S. EPA's Local Limits Development Guidance (July 2004 and spreadsheet found at: http://www.epa.gov/region5/water/npdestek/Locallmt.XLS), and submit the evaluation and any proposed revisions to its local limits to IEPA and U.S. EPA Region 5 for review and approval. To demonstrate technical justification for new local industrial user limits or justification for retaining existing limits, the following information must be submitted to U.S. EPA:
  - a. Total plant flow
  - b. Domestic/commercial pollutant contributions for pollutants of concern
  - c. Industrial pollutant contributions and flows
  - d. Current POTW pollutant loadings, including loadings of conventional pollutants
  - e. Actual treatment plant removal efficiencies, as a decimal (primary, secondary, across the wastewater treatment plant)
  - f. Safety factor to be applied
  - g. Identification of applicable criteria:
    - i. NPDES permit conditions
      - •Specific NPDES effluent limitations
      - Water-quality criteria
      - •Whole effluent toxicity requirements
      - •Criteria and other conditions for sludge disposal
    - ii. Biological process inhibition
      - Nitrification
      - Sludge digester
      - Collection system problems
  - h. The Permittee's sludge disposal methods (land application, surface disposal, incineration, landfill)
  - i. Sludge flow to digester
  - j. Sludge flow to disposal
  - k. % solids in sludge to disposal, not as a decimal
  - I. % solids in sludge to digester, not as a decimal
  - m. Plant removal efficiencies for conventional pollutants
  - If revised industrial user discharge limits are proposed, the method of allocating available pollutants loads to industrial users
  - o. A comparison of maximum allowable headworks loadings based on all applicable criteria listed in g, above
  - p. Pollutants that have caused:
    - i. Violations or operational problems at the POTW, including conventional pollutants
    - ii. Fires and explosions
    - iii. Corrosion
    - iv. Flow obstructions
    - v. Increased temperature in the sewer system
    - vi. Toxic gases, vapors or fumes that caused acute worker health and safety problems
    - vii. Toxicity found through Whole Effluent Toxicity testing
    - viii. Inhibition
  - q. Pollutants designated as "monitoring only" in the NPDES permit
  - r. Supporting data, assumptions, and methodologies used in establishing the information a through q above.
- 9 Modifications of your Pretreatment Program shall be submitted in accordance with 40 CFR § 403.18, which established conditions for substantial and nonsubstantial modifications. All requests should be sent in electronic format to <a href="mailto:r5npdes@epa.gov">r5npdes@epa.gov</a>, attention: NPDES Programs Branch.
- B. Reporting and Records Requirements
- 1. The Permittee shall provide an annual report briefly describing the permittee's pretreatment program activities over the previous calendar year. Permittees who operate multiple plants may provide a single report providing all plant-specific reporting requirements are met. Such report shall be submitted no later than April 28th of each year to USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: Water Enforcement and Compliance Assurance Branch, and shall be in the format set forth in IEPA's POTW Pretreatment Report Package which contains information regarding:
  - a. An updated listing of the Permittee's significant industrial users, indicating additions and deletions from the previous year, along with brief explanations for deletions. The list shall specify which categorical Pretreatment standards, if any, are applicable to each Industrial User.
  - b. A descriptive summary of the compliance activities including numbers of any major enforcement actions, (i.e.,

administrative orders, penalties, civil actions, etc.), and the outcome of those actions. This includes an assessment of the compliance status of the Permittee's industrial users and the effectiveness of the Permittee's Pretreatment Program in meeting its needs and objectives.

- c. A description of all substantive changes made to the Permittee's Pretreatment Program. Changes which are "substantial modifications" as described in 40 CFR § 403.18(c) must receive prior approval from the USEPA.
- d. Results of sampling and analysis of POTW influent, effluent, and sludge.
- e. A summary of the findings from the priority pollutants sampling. As sufficient data becomes available the IEPA may modify this Permit to incorporate additional requirements relating to the evaluation, establishment, and enforcement of local limits for organic pollutants. Any permit modification is subject to formal due process procedures pursuant to State and Federal law and regulation. Upon a determination that an organic pollutant is present that causes interference or pass through, the Permittee shall establish local limits as required by 40 CFR § 403.5(c).
- The Permittee shall maintain all pretreatment data and records for a minimum of three (3) years. This period shall be extended during the course of unresolved litigation or when requested by the IEPA or the Regional Administrator of USEPA. Records shall be available to USEPA and the IEPA upon request.
- 3. The Permittee shall establish public participation requirements of 40 CFR 25 in implementation of its Pretreatment Program. The Permittee shall at least annually, publish the names of all IU's which were in significant noncompliance (SNC), as defined by 40 CFR § 403.8(f)(2)(viii), in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the Permittee or based on any more restrictive definition of SNC that the POTW may be using.
- 4. The Permittee shall provide written notification to the USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: NPDES Programs Branch and to the Deputy Counsel for the Division of Water Pollution Control, IEPA, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 within five (5) days of receiving notice that any Industrial User of its sewage treatment plant is appealing to the Circuit Court any condition imposed by the Permittee in any permit issued to the Industrial User by Permittee. A copy of the Industrial User's appeal and all other pleadings filed by all parties shall be mailed to the Deputy Counsel within five (5) days of the pleadings being filed in Circuit Court.

# C. <u>Monitoring Requirements</u>

1. The Permittee shall monitor its influent, effluent and sludge and report concentrations of the following parameters on monitoring report forms provided by the IEPA and include them in its annual report. Samples shall be taken at semi-annual intervals at the indicated reporting limit or better and consist of a 24-hour composite unless otherwise specified below. Sludge samples shall be taken of final sludge and consist of a grab sample reported on a dry weight basis.

STORET		Minimum
CODE	PARAMETER	reporting limit
01097	Antimony	0.07 mg/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01012	Beryllium	0.005 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hex) (grab not to exceed 24 hours)*	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide* (grab) (available **** or amenable to chlorination)	5.0 ug/L
00720	Cyanide (total) (grab)	5.0 ug/L
00951	Fluoride*	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)*	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (effluent grab)***	1.0 ng/L**
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)*	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01059	Thallium	0.3 mg/L
01092	Zinc	0.025 mg/L

- \* Influent and effluent only
- \*\*1 ng/L = 1 part per trillion.
- \*\*\*Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E, other approved methods may be used for influent (composite) and sludge.
- \*\*\*\* USEPA Method OIA-1677.

Minimum reporting limits are defined as - (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservatives, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined including all oxidation states. Where constituents are commonly measured as other than total, the phase is so indicated.

- 2. The Permittee shall conduct an analysis for the one hundred and ten (110) organic priority pollutants identified in 40 CFR 122 Appendix D, Table II as amended. This monitoring shall be done annually and reported on monitoring report forms provided by the IEPA and shall consist of the following:
  - a. The influent and effluent shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. The sampling shall be done during a day when industrial discharges are expected to be occurring at normal to maximum levels.

Samples for the analysis of acid and base/neutral extractable compounds shall be 24-hour composites.

Five (5) grab samples shall be collected each monitoring day to be analyzed for volatile organic compounds. A single analysis for volatile pollutants (Method 624) may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than one (1) mL of each grab included in the composite.

Wastewater samples must be handled, prepared, and analyzed by GC/MS in accordance with USEPA Methods 624 and 625 of 40 CFR 136 as amended.

- b. The sludge shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. A sludge sample shall be collected concurrent with a wastewater sample and taken as final sludge.
  - Sampling and analysis shall conform to USEPA Methods 624 and 625 unless an alternate method has been approved by IEPA.
- c. Sample collection, preservation and storage shall conform to approved USEPA procedures and requirements.
- 3. In addition, the Permittee shall monitor any new toxic substances as defined by the Clean Water Act, as amended, following notification by the IEPA.
- 4. Permittee shall report any noncompliance with effluent or water quality standards in accordance with Standard Condition 12(e) of this Permit.
- 5. Analytical detection limits shall be in accordance with 40 CFR 136. Minimum detection limits for sludge analyses shall be in accordance with 40 CFR 503.
- D. Pretreatment Reporting

USEPA Region 5 is the Approval Authority for administering the pretreatment program in Illinois. All requests for modification of pretreatment program elements should be submitted in redline/strikeout electronic format and should be sent to USEPA at r5npdes@epa.gov.

Permittee shall upon notice from USEPA, modify any pretreatment program element found to be inconsistent with 40 CFR 403.

<u>SPECIAL CONDITION 12</u>. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD5, CBOD5, Suspended Solids, pH and Ammonia due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 5 days/week if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required <u>Without Public Notice</u> when a permit modification is received by the Permittee from the IEPA.

<u>SPECIAL CONDITION 13.</u> During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 14. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) VARIABLE~.

### **Biomonitoring**

- 1. Acute Toxicity Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with <a href="Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.)">Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.)</a>
  EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:
  - a. Fish 96 hour static LC<sub>50</sub> Bioassay using fathead minnows (Pimephales promelas).
  - b. Invertebrate 48-hour static LC<sub>50</sub> Bioassay using Ceriodaphnia.
- 2. Testing Frequency The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Sample collection and testing must be conducted in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit. When possible, bioassay sample collection should coincide with sample collection for metals analysis or other parameters that may contribute to effluent toxicity.
- 3. Reporting Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.
- 4. Toxicity Should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within one (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification and reduction evaluation process as outlined below.
- 5. Toxicity Identification and Reduction Evaluation Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatment, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification evaluation process in accordance with Methods for Aquatic Toxicity Identification Evaluations, EPA/600/6-91/003. The IEPA may also require, upon notification, that the Permittee prepare a plan for toxicity reduction evaluation to be developed in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, which shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

### SPECIAL CONDITION 15.

# AUTHORIZATION OF COMBINED SEWER AND TREATMENT PLANT DISCHARGES

The IEPA has determined that at least a portion of the collection system consists of combined sewers. References to the collection system and the sewer system refer only to those parts of the system which are owned and operated by the Permittee unless otherwise indicated. The Permittee is authorized to discharge from the overflow(s)/bypass(es) listed below provided the diversion structure is located on a combined sewer and the following terms and conditions are met:

<u>Discharge Number</u> <u>Location</u> <u>Receiving Water</u>

003-84" Combined Sewer Overflow 38°41'47"N 90°10'49"W Chain of Rocks Canal

004-108" Combined Sewer Overflow 38°41'47"N 90°10'49"W Chain of Rocks Canal

## Monitoring, Reporting and Notification Requirements

 The Permittee shall monitor the frequency of discharge (number of discharges per month) and estimate the duration (in hours) of each discharge from each outfall listed in this Special Condition. Estimates of storm duration and total rainfall shall be provided for each storm event.

Start Date	Rainfall Duration (hrs.)	Rainfall Amount (in.)	CSO Outfall #	Outfall Description	Estimated Duration of CSO Discharge (hrs.)	Estimated Volume of CSO Discharge (MG)
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For frequency reporting, all discharges from the same storm, or occurring within 24 hours, shall be reported as one. The date that a discharge commences shall be recorded for each outfall. Reports shall be in the form specified by the IEPA and on forms provided by the IEPA (e.g., Form IL532-2471, or updated form of same). These forms shall be submitted to the IEPA monthly with the DMRs and covering the same reporting period as the DMRs. Parameters (other than flow frequency and volume), if required in this Permit, shall be sampled and reported as indicated in the transmittal letter for such report forms.

### **CSO Treatment Requirements**

- 2. All combined sewer overflows shall be given sufficient treatment to prevent pollution and the violation of applicable water quality standards and to the extent required by the federal Clean Water Act including any amendments made by the Wet Weather Water Quality Act of 2000. Sufficient treatment shall consist of the following:
  - a. All dry weather flows, and the first flush of storm flows shall meet all applicable effluent standards and the effluent limitations as required for the main STP outfall;
  - b. Additional flows, but not less than ten times the average dry weather flow for the design year, shall receive a minimum of primary treatment and disinfection with adequate retention time; and,
  - c. Additional flows, shall be treated to the extent necessary to comply with applicable water quality standards and the federal Clean Water Act, including any amendments made by the Wet Weather Water Quality Act of 2000.
- 3. All CSO discharges authorized by this Permit shall be treated, in whole or in part, to the extent necessary to prevent accumulations of sludge deposits, floating debris and solids in accordance with 35 III. Adm. Code 302.203 and to prevent depression of oxygen levels below the applicable water quality standards.
- 4. Overflows during dry weather are prohibited. Dry weather overflows shall be reported to the IEPA pursuant to Standard Condition 12(e) of this Permit (24 hour notice).
- 5. The collection system shall be operated to optimize transport of wastewater flows to the WWTP and shall be operated to maximize treatment of wastewater flows and to minimize CSOs.
- 6. The treatment system shall be operated to maximize treatment of wastewater flows.

### Nine Minimum Controls

- 7. The Permittee shall comply with the nine minimum controls contained in the National CSO Control Policy published in the Federal Register on April 19, 1994. The nine minimum controls are:
  - a. Proper operation and maintenance programs for the sewer system and the CSOs (Compliance with this Item shall be met through the requirements imposed by Paragraph 9 of this Special Condition);
  - b. Maximum use of the collection system for storage (Compliance with this Item shall be met through the requirements imposed by Paragraphs 2, 5, and 9 of this Special Condition);
  - c. Review and modification of pretreatment requirements to assure CSO impacts are minimized (Compliance with this Item shall be met through the requirements imposed by Paragraph 10 of this Special Condition);
  - d. Maximization of flow to the POTW for treatment (Compliance with this Item shall be met through the requirements imposed by Paragraphs 2, 5, 6 and 9 of this Special Condition);
  - e. Prohibition of CSOs during dry weather (Compliance with this Item shall be met through the requirements imposed by Paragraph 4 of this Special Condition);
  - f. Control of solids and floatable materials in CSOs (Compliance with this Item shall be met through the requirements imposed by Paragraphs 3 and 9 of this Special Condition);
  - g. Pollution prevention programs which focus on source control activities (Compliance with this Item shall be met through the requirements imposed by Paragraph 7 of this Special Condition, See Below);
  - h. Public notification to ensure that citizens receive adequate information regarding CSO occurrences and CSO impacts (Compliance with this Item shall be met through the requirements imposed by Paragraph 12 of this Special Condition); and,
  - i. Monitoring to characterize impacts and efficiency of CSO controls (Compliance with this Item shall be met through the requirements imposed by Paragraphs 1 and 11 of this Special Condition).

A CSO pollution prevention plan (PPP) shall be developed by the Permittee unless one has already been prepared for this collection system. Any previously-prepared PPP shall be reviewed, and revised if necessary, by the Permittee to address the items contained in Chapter 8 of the U.S. EPA guidance document, Combined Sewer Overflows, Guidance For Nine Minimum Controls, and any items contained in previously-sent review documents from the IEPA concerning the PPP. Combined Sewer Overflows, Guidance For Nine Minimum Controls is available on line at http://www.epa.gov/npdes/pubs/owm030.pdf. The PPP (or revised PPP) shall be presented to the general public at a public information meeting conducted by the Permittee annually during the term of this Permit. The Permittee shall submit documentation that the pollution prevention plan complies with the requirements of this Permit and that the public information meeting was held. Such documentation shall be submitted to the IEPA within twelve (12) months of the effective date of this Permit and shall include a summary of all significant issues raised by the public, the Permittee's response to each issue, and two (2) copies of the "CSO Pollution Prevention Plan Certification" one (1) with original signatures. This certification form is available online at <a href="http://www.epa.state.il.us/water/permits/waste-water/forms/cso-pol-prev.pdf">http://www.epa.state.il.us/water/permits/waste-water/forms/cso-pol-prev.pdf</a>. Following the public meeting, the Permittee shall implement the pollution prevention plan and shall maintain a current pollution prevention plan, updated to reflect system modifications, on file at the sewage treatment works or other acceptable location and made available to the public. The pollution prevention plan revision shall be submitted to the IEPA one (1) month form the revision date.

# Sensitive Area Considerations

8. Pursuant to Section II.C.3 of the federal CSO Control Policy of 1994, sensitive areas are any water likely to be impacted by a CSO discharge which include one or more of the following criteria: (1) designated as an Outstanding National Resource Water; (2) found to contain shellfish beds; (3) found to contain threatened or endangered aquatic species or their habitat; (4) used for primary contact recreation; or, (5) within the protection area for a drinking water intake structure.

The IEPA has tentatively determined that none of the outfalls listed in this Special Condition discharge to sensitive areas. However, if information becomes available that causes the IEPA to reverse this determination, the IEPA will notify the Permittee in writing. Upon the date contained in the notification, the Permittee shall revise the LTCP and schedule to eliminate or relocate these outfalls. If elimination or relocation is not economically feasible or technically achievable, the Permittee shall submit a revised plan and

schedule for treating the discharge. Such justification shall be in accordance with Section II.C.3 of the National CSO Control Policy.

#### Operational and Maintenance Plans

9. A CSO operational and maintenance plan ("CSO O&M plan") shall be developed and presented to the general public at a public information meeting conducted by the Permittee within nine (9) months of the effective date of this Permit. The Permittee shall submit documentation that the CSO O&M plan complies with the requirements of this Permit and that the public information meeting was held. Such documentation shall be submitted to the IEPA within twelve (12) months of the effective date of this Permit and shall include a summary of all significant issues raised by the public, the Permittee's response to each issue, and two (2) copies of the "CSO Operational Plan Checklist and Certification", one (1) copy with original signatures. Copies of the "CSO Operational Plan Checklist and Certification" are available online at <a href="http://www.epa.state.il.us/water/permits/waste-water/forms/cso-checklist.pdf">http://www.epa.state.il.us/water/permits/waste-water/forms/cso-checklist.pdf</a>. Following the public meeting, the Permittee shall implement the CSO O&M plan within 90 days and shall maintain a current CSO O&M plan, updated to reflect system modifications, on file at the sewage treatment works and made available to the public. The CSO O&M plan revisions shall be submitted to the IEPA one (1) month from the revision date.

The objectives of the CSO O&M plan are to reduce the total loading of pollutants and floatables entering the receiving stream and to ensure that the Permittee ultimately achieves compliance with water quality standards. These plans, tailored to the local government's collection and waste treatment systems, shall include mechanisms and specific procedures where applicable to ensure:

- a. Collection system inspection on a scheduled basis;
- b. Sewer, catch basin, and regulator cleaning and maintenance on a scheduled basis;
- c. Inspections are made and preventive maintenance is performed on all pump/lift stations;
- d. Collection system replacement, where necessary;
- e. Detection and elimination of illegal connections;
- f. Detection, prevention, and elimination of dry weather overflows;
- g. The collection system is operated to maximize storage capacity and the combined sewer portions of the collection system are operated to delay storm water entry into the system; and,
- h. The treatment and collection systems are operated to maximize treatment.

# Sewer Use Ordinances

- 10. The Permittee, within six (6) months of the effective date of this Permit, shall review and where necessary, modify its existing sewer use ordinance to ensure it contains provisions addressing the conditions below. If no ordinance exists, such ordinance shall be developed, adopted, and implemented within six (6) months from the effective date of this Permit. Upon completion of the review of the sewer use ordinance(s), the Permittee shall submit two (2) copies of a completed "Certification of Sewer Use Ordinance Review", one (1) copy with original signatures. Copies of the certification form can be obtained on line at <a href="http://www.epa.state.il.us/water/permits/waste-water/forms/sewer-use.pdf">http://www.epa.state.il.us/water/permits/waste-water/forms/sewer-use.pdf</a>. The Permittee shall submit additional copies of the sewer use ordinance(s) to the IEPA one (1) month from the revision date. Sewer use ordinances must contain specific provisions to:
  - a. Prohibit introduction of new inflow sources to the sanitary sewer system;
  - b. Require that new sanitary sewer construction tributary to the combined sewer system be designed to minimize and/or delay inflow contribution to the combined sewer system;
  - c. Require that inflow sources on the combined sewer system be connected to a storm sewer in accordance with any approved LTCP,

- d. Provide that any new building domestic sanitary sewage wastewater connection shall be distinct from the building inflow connection.
- e. Assure that CSO impacts from industrial and/or commercial sources are minimized and controlled by determining which industrial and/or commercial discharges, that are tributary to CSOs and,
- f. Assure that the owners of all publicly owned systems with sewers tributary to the Permittee's collection system have procedures in place adequate to ensure that the objectives, mechanisms, and specific procedures given in Paragraph 8 of this Special Condition are achieved.

The Permittee shall enforce the applicable sewer use ordinances.

# Long-Term Control Planning and Compliance with Water Quality Standards

- 11. A. Pursuant to Section 301 of the federal Clean Water Act, 33 U.S.C. Section 1311 and 40 CFR Section 122.4, discharges from the CSOs, including the outfalls listed in this Special Condition and any other outfall listed as a "Treated Combined Sewage Outfall", shall not cause or contribute to violations of applicable water quality standards or cause use impairment in the receiving waters. In addition, discharges from CSOs shall comply with all applicable parts of 35 III. Adm. Code 306.305(a), (b), (c), and (d).
  - В. Based on the number of CSO events reported over the past 5 years, the Permittee experiences not more than 4 CSO events per year. Based on this frequency, Section II.C.4.a.i of the CSO Control Policy of 1994 (policy) infers that with not more than 4 overflow events per year, one is presumed to meet the water quality based requirements of the Federal Clean Water Act. Pursuant to Section I.C.1 and Section II.C.9 of the Policy, the Permittee shall develop and implement a post-construction water quality management program adequate to verify compliance with water quality standards and to verify protection of designated uses in the receiving water(s) and to ascertain the effectiveness of CSO controls. Guidance on post-construction monitoring plans is available at: http://www.epa.gov/npdes/pubs/final cso pccm quidance.pdf. This program shall contain a plan that details the monitoring protocols such as biological assessments, whole effluent toxicity testing, and sediment sampling. The plan shall be submitted to the IEPA and be presented to the public at an informational meeting within nine (9) months of the effective date of this permit. Within twelve (12) months of the effective date of this permit, the Permittee shall submit to IEPA, a summary of all significant issues raised by the public, the Perittee's response to each issue and three (3) copies of the proposed plan (revised following the public meeting, if necessary). The Permittee shall respond to an IEPA review letter in writing within ninety (90) days of the date of such an initial review letter and within thirty (30) days of any subsequent review letter(s), if any. The post-construction monitoring plan shall be implemented within six (6) months of the date of IEPA approval. Within thirty (30) months of the approval of the plan, the results shall be submitted to IEPA along with recommendations and conclusions as to whether or not the discharges from any CSOs (treated or untreated) authorized under this permit are causing or contributing to violations of applicable water quality standards or causing use impairment in the receiving water(s).
  - C. Shold the results of the post-construction water quality monitoring plan or if information becomes available that causes IEPA to conclude that the discharges from any CSOs (treated or untreated) authorized to discharge under this permit are causing or contributing to violations of water quality standards or are causing use impairment in the receiving water(s), the IEPA will notify the permittee in writing. Upon receiving such notification the permittee shall develop and implement a CSO Long-Term Control Plan (LTCP) for assuring that the discharges from the CSOs (treated or untreated) authorized in this permit comply with the provisions of Paragraph 10.A above. The LTCP shall contain all applicable elements of paragraph 10.D below including a schedule of implementation and provisions for re-evaluating compliance with applicable standards and regulations after complete implementation. Three copies of the LTCP shall be submitted to the IEPA within twelve (12) months of receiving the IEPA written notice. The LTCP shall be:
    - 1. Consistent with Section II.C.4.a.iof the policy; or
    - 2. Consistent with either Section II.C.4.a.ii, Section II.C.4.a.iii, or Section II.C.4.b of the Policy and be accompanied by data sufficient to demonstrate that the LTCP, when completely implemented, will be sufficient to meet water quality standards.
  - D. Pursuant to the Policy, the required components of the LTCP include the following:
    - Characterization, monitoring, and modelling of the Combined Sewer System (CSS);
    - 2. Consideration of Sensitive Areas;
    - 3. Evaluation of alternatives;
    - Cost/Performance considerations;

- 5. Revised CSO operational plan;
- 6. Maximizing treatment at the treatment plant;
- 7. Implementation schedule;
- 8. Post-construction compliance monitoring program: and
- 9. Public participation.

Following submittal of the LTCP, the permittee shall respond to any initial IEPA review letter in writing within ninety (90) days of the date of such a review letter, and within 30 days to any subsequent review letter(s), if any. Implementation of the LTCP shall be as indicated by IEPA in writing or other enforceable mechanism. \

# **NOTIFICATION REQUIREMENTS**

- 12. A public notification program in accordance with Section II.B.8 of the federal CSO Control Policy of 1994 shall be developed employing a process that actively informs the affected public. The program shall include at a minimum public notification of CSO occurrences and CSO impacts, with consideration given to including mass media and/or Internet notification. The Permittee shall also post and maintain signs in waters likely to be impacted by CSO discharges at the point of discharge and at points where these waters are used for primary contact recreation. Signages's message should be visible from both the shoreline and water vessel approach (if appropriate), respectively. Provisions shall be made to include modifications of the program when necessary and notification to any additional member of the affected public. The program shall be presented to the general public at a public information meeting conducted by the Permittee. The Permittee shall conduct the public information meeting providing a summary and status of the CSO program annually within the term of this Permit. The Permittee shall submit documentation that the public information meeting was held, shall submit a summary of all significant issues raised by the public and the Permittee's response to each issue and shall identify any modifications to the program as a result of the public information meeting within 60 days of holding the public meeting. The Permittee shall submit copies of the public notification program to the IEPA upon written request.
- 13. If any of the CSO discharge points listed in this permit are eliminated, or if additional CSO discharge points, not listed in this permit, are discovered, the Permittee shall notify the IEPA in writing within one (1) month of the respective outfall elimination or discovery. Such notification shall be in the form of a request for the appropriate modification of this NPDES Permit.

### Summary of Compliance Dates in this CSO Special Condition

14. The following summarizes the dates that submittals contained in this Special Condition are due at the IEPA (unless otherwise indicated):

Submission of CSO Monitoring Data (Paragraph 11)	Annual reports by January 1
Control (or Justification for No Control) of CSOs to Sensitive Areas (Paragraph 7)	3 months from IEPA notification
Certification of Sewer Use Ordinance Review (Paragraph 9)	6 months from the effective date of this Permit
Conduct Pollution Prevention, OMP and PN Public Information Meeting (Paragraphs, 6, 8 and 12)  No Submittal Due with this Milestone	9 months from the effective date of this Permit
Submit Pollution Prevention Certification, OMP Certification, and PN Information Meeting Summary (Paragraphs, 6, 8 and 12)	12 months from the effective date of this Permit
Submit CSO O&M plan (paragraph 8)	12 months from the effective date of this permit
Compliance Monitoring Plan Submittal (Paragraph 11)	12 months from the effective date of this permit

All submittals listed in this Special Condition can be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

Attention: CSO Coordinator, Compliance Assurance Section

All submittals hand carried shall be delivered to 1021 North Grand Avenue East.

SPECIAL CONDITION 16. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The permit may be modified to incorporate any applicable standards for sewage sludge use or disposal promulgated under Section 45(d) of the CWA.

The Permittee shall comply with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section Mail Code #19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

<u>SPECIAL CONDITION 17</u>. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by III. Adm.

Code 306.304. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management Strategy, within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly. The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they are designed.

The CMOM plan shall include the following elements:

#### a. Measures and Activities:

- 1. A complete map and system inventory for the collection system owned and operated by the Permittee;
- 2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
- Documentation of unplanned maintenance;
- 4. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; use flow monitoring as necessary;
- 5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee; and
- 6. Scheduled inspections and testing.
- 7. The permittee shall develop and implement an Asset Management Strategy to ensure the long-term sustainability of the collection system. The Asset Management Strategy shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace, or rehabilitate particular assets and develop long-term funding strategies.
- 8. Asset Management Strategies shall include (as further described in the Asset Management Guidance Document), but is not limited to the following elements:
  - A. Asset Inventory and State of the Assets.
  - B. Level of Services.
  - C. Critical Asset Identification.
  - D. Life Cycle Costing.
  - E. Long-term Funding Strategies.

### b. Design and Performance Provisions:

- 1. Monitor the effectiveness of CMOM;
- 2. Upgrade the elements of the CMOM plan as necessary; and
- 3. Maintain a summary of CMOM activities.

### c. Overflow Response Plan:

- 1. Know where overflows and backups within the facilities owned and operated by the Permittee occur;
- 2. Respond to each overflow or backup to determine additional actions such as clean up; and
- Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow/infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.

# d. System Evaluation Plan:

- 1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
- 2. Evaluate plans to reduce I/I and eliminate SSOs;
- 3. Special provisions for Pump Stations and force mains and other unique system components; and
- 4. Construction plans and schedules for correction.

# e. Reporting and Monitoring Requirements:

- 1. Program for SSO detection and reporting; and
- 2. Program for tracking and reporting basement back-ups, including general public complaints.

### f. Third Party Notice Plan:

- 1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare:
- 2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
- 3. Identifies who shall receive the notification;
- 4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
- 5. Includes a description of the lines of communication; and
- 6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to this following web site addresses. http://www.epa.gov/npdes/pubs/cmom\_5.pdf, http://www.epa.gov/npdes/pubs/assetmanagement.pdf.

SPECIAL CONDITION 18: Modeling or field studies may be used to demonstrate the availability of a mixing zone and ZID (zone of initial dilution). The purpose of these optional studies is to define the dilution ratios present during 7Q10 low receiving stream flow conditions. Any report submitted to IEPA should show effluent concentrations at various distances downstream of the effluent outfall, sufficient to demonstrate the areas of the mixing zone and ZID, during the observed or modeled low flow condition. The mixing regulations of 35 IAC 302.102 will then be used to determine if the conditions necessary for the Agency to grant a mixing zone and ZID are present. If the permittee intends to pursue this option, a study plan outlining the methodologies proposed to be used must be submitted for IEPA approval. The IEPA will review the submitted sample data and may reopen and modify this permit to eliminate or include revised effluent limitations based on the results of the collected data.

SPECIAL CONDITION 19. The Permittee shall, within eighteen (18) months of the effective date of this permit, prepare and submit to the Agency a feasibility study that identifies the method, timeframe, and costs of reducing phosphorus levels in its discharge to a level consistently meeting a potential future effluent limit of 1 mg/L, 0.5 mg/L and 0.1 mg/L. The study shall evaluate the construction and O & M costs of the application of these limits on a monthly, seasonal and annual average basis.

SPECIAL CONDITION 20. The Permittee shall develop and submit to the Agency a Phosphorus Discharge Optimization Plan within eighteen (18) months of the effective date of this permit. The plan shall include a schedule for the implementation of these optimization measures. Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The Permittee's evaluation shall include, but not be limited to, an evaluation of the following optimization measures:

- A. WWTF influent reduction measures.
  - 1. Evaluate the phosphorus reduction potential of users.
  - 2. Determine which sources have the greatest opportunity for reducing phosphorus (i.e., industrial, commercial, institutional, municipal and others).
    - a. Determine whether known sources (i.e., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
    - b. Evaluate and implement local limits on influent sources of excessive phosphorus.
- B. WWTF effluent reduction measures.
  - 1. Reduce phosphorus discharges by optimizing existing treatment processes.
    - a. Adjust the solids retention time for nitrification, denitrification, or biological phosphorus removal.
    - b. Adjust aeration rates to reduce dissolved oxygen and promote simultaneous nitrification-denitrification.
    - c. Add baffles to existing units to improve microorganism conditions by creating divided anaerobic, anoxic, and aerobic zones.
    - d. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
    - e. Minimize impact on recycle streams by improving aeration within holding tanks.
    - f. Reconfigure flow through existing basins to enhance biological nutrient removal.
    - g. Increase volatile fatty acids for biological phosphorus removal.